

**STATE OF ILLINOIS
ILLINOIS COMMERCE COMMISSION**

COMMONWEALTH EDISON)	
COMPANY,)	
)	
Petition for Approval of a Revision to)	Docket No. 00-0361
Decommissioning Expense Adjustment)	
Rider to Take Effect on Transfer of)	
ComEd's Generating Stations)	

**DIRECT TESTIMONY OF
EDWARD C. BODMER
ON BEHALF OF
CITGO PETROLUEM CORP., GENERAL MILLS, INC.,
THE METROPOLITAN CHICAGO HEALTHCARE COUNCIL,
AND R.R. DONNELLEY & SONS COMPANY**

DATED: July 31, 2000

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DIRECT TESTIMONY OF EDWARD C. BODMER

Q. What is your name and on whose behalf are you testifying?

A. My name is Edward C. Bodmer. I am testifying on behalf of Citgo Petroleum Corp., General Mills, Inc., the Metropolitan Chicago Healthcare Council and R. R. Donnelley & Sons Company (collectively the "Industrial and Health Care Customers Coalition" or the "Coalition").

I.

PROFESSIONAL BACKGROUND

Q. Summarize your educational background and professional experience.

A. I received a B.S., with highest honors, in Finance from the University of Illinois in 1979 and an MBA, with honors, from the University of Chicago in 1986. For the past ten years I have developed a consulting practice in the electric utility industry, which has involved assignments for financial institutions, utility companies, government agencies, alternative retail electric suppliers ("ARES"), and meter service providers ("MSPs"). My projects have addressed issues related to industry re-structuring, forecasting, pricing, resource planning and performance evaluation. I have testified regularly before the Illinois Commerce Commission ("Commission") and other regulatory bodies on a wide variety of subjects, including revenue requirements, cost-of-service and rate design. I have completed a number of assignments dealing with deregulation of electric utility generation, including an analysis of the divestiture of generating assets on behalf of the Maine Public Service Commission.

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My regulatory experience began in 1979 with my employment on the Accounting and Finance Staff of the Commission, and has encompassed numerous assignments on regulatory issues while employed by the Commission and as a private consultant. From 1986 to 1990, I was employed at the First National Bank of Chicago where I managed the credit analysis of all energy loans, including transactions with electric and gas utility companies. I was promoted to Vice President and I directed a number of energy-related financial advice projects for bank clients. I have taught economics courses at Lewis University and I have developed and taught specialized financial modeling and economics courses throughout the world.

II.

PURPOSE AND CONTEXT OF TESTIMONY

Q. What is the purpose of your testimony in this proceeding?

A. My testimony provides the Commission with an analysis of how the proposal of Commonwealth Edison Company (“Edison”) to change the manner in which decommissioning costs are recovered from ratepayers would affect the members of the Coalition. The focus of this testimony is on economic and policy issues associated with acceleration of the recovery of uncertain decommissioning costs. My emphasis is on issues related to financial theory and to equitable pricing associated with Edison’s proposal and the relationship between Edison’s proposal to the de-regulation of the generation component of the electric industry in Illinois.

Q. How is your testimony organized?

A. My testimony is organized as follows:

First, my testimony provides an overview of Edison’s filing. In this section, the policy issues are highlighted and there is an explanation of the “negotiating dilemma” facing the Commission and ratepayers in the instant proceeding.

1
2 **Second**, my testimony sets forth the Coalition’s recommendation that the
3 Commission should reject or substantially modify Edison’s proposal. In
4 no event should the Commission endorse Edison’s proposal to require
5 ratepayers to make additional up-front decommissioning payments.
6

7 **Third**, my testimony applies the “negotiating dilemma” to the facts of this
8 case. The Commission should reject Edison’s proposal because Edison
9 has placed the Commission and ratepayers in a negotiating dilemma.
10

11 **Fourth**, my testimony debunks Edison’s claim that its proposal would
12 save its customers \$1 billion and summarizes the financial impact of
13 allocating some of the decommissioning costs to Exelon Genco.
14

15 **Finally**, my testimony explains why the Commission should allocate a
16 portion of the decommissioning expenses to Exelon Genco. While nuclear
17 generation presently might not be the lowest cost generation, given recent
18 developments, it is anticipated that the nuclear plants will produce low-
19 cost electricity in the future. This section of my testimony highlights why
20 it would be poor public policy to have ratepayers further subsidize Exelon
21 Genco’s operation of these plants.
22

23 **Q. What is the ultimate conclusion of your testimony?**

24 A. Edison’s proposal is not a “great deal” for consumers, as asserted by Edison. In
25 fact, Edison’s proposal is a valuable deal for Edison and its shareholders; it is a
26 costly proposal from the ratepayers’ perspective. If the Commission allows
27 Edison to transfer its nuclear generation assets to its affiliate, Illinois consumers
28 should not be required to make any further payments toward nuclear
29 decommissioning.
30

1 **Q. How would Edison’s proposal affect the electric bills paid by members of the**
2 **Coalition?**

3 A. Electric bills of the Coalition members would change by sizable dollar amounts
4 depending on the course of action chosen by the Commission. For example, for
5 some large customers, Edison’s proposal would result in a **\$250,000 per year**
6 **rate increase**. A manufacturing customer consuming 8 million kWh per month
7 would experience approximately a **\$43,000 per year rate increase**. The electric
8 bill of a typical hospital would **increase by \$15,000 annually** if Edison’s
9 proposal were adopted.

10
11 On the other hand, if the Commission determines that up-front funding for
12 decommissioning should be eliminated, the electric bill of a typical hospital
13 would fall by \$34,000 annually; the above-described manufacturing customer
14 would experience a decrease of almost \$100,000 per year; and some large
15 customers would experience a decrease of more than \$600,000 per year.

16
17 **Q. What is your general approach to analysis of issues related to Edison’s**
18 **decommissioning proposal?**

19 A. My approach is to evaluate major policy issues associated with decommissioning
20 cost recovery and market-based pricing for nuclear plants from *Edison’s*
21 *perspective* in a negotiating context. The costs that ratepayers incur for
22 decommissioning costs under Edison’s proposal are the “flip side” of the benefits
23 that Edison realizes. For all of the financial issues related to decommissioning, an
24 analysis of the benefits afforded Edison is the complement of an analysis of the
25 costs to ratepayers. With regard to Edison’s proposal in the instant proceeding, if
26 something is good for Edison, than it is bad for ratepayers.

27
28 **Q. Please summarize the components of Edison’s proposal from a policy**
29 **perspective**

30 A. From a policy standpoint, Edison’s proposal contains **two** primary elements.

1 The **first** component involves restructuring the timing and risk aspects of
2 decommissioning flows. Edison has requested the Commission to accelerate
3 decommissioning funding from ratepayers and to take away ratepayer’s statutory
4 right to obtain the benefit from new information.

5 The **second** component relates to decommissioning allocation issues. Edison has
6 asked the Commission to rule that its ratepayers remain liable for all of the costs
7 of decommissioning the nuclear plants regardless of whether Edison keeps or sells
8 them; its unregulated subsidiary company “Exelon Genco” effectively would be
9 relieved of all financial responsibility for decommissioning. Edison assumes that
10 even if it transfers its nuclear assets to an Exelon Genco, ratepayers still should be
11 responsible for payment of the entire dollar amount of the decommissioning
12 liabilities. Similarly, Edison suggests that the subsidiary company, Exelon
13 Genco, should not have any economic liability if decommissioning costs
14 ultimately turn out to be the same as the dollar level currently forecasted by the
15 Company.

16

17 **Q. What are the primary financial aspects to Edison’s proposal?**

18 A. To consider the financial aspects of Edison’s proposal, the Commission should
19 examine two issues from Edison’s financial perspective:

20

21 1) What value is transferred to or from Edison related to restructuring
22 decommissioning cash flows, whereby ratepayers are asked to accept Edison’s
23 current cost estimate, to accelerate decommissioning payments, and to forgo
24 the ability to have reduced contributions as new information about
25 decommissioning costs is available during the next twenty years?

26 2) What is the value that Edison realizes because of its proposal to allocate and
27 recover all (or virtually all) decommissioning costs from captive ratepayers
28 and little if any costs from its unregulated subsidiary company, while at the
29 same time realizing market prices for power that will probably be above
30 embedded costs during the later portions of the lifetime of its nuclear plants?

31

1 The Commission should keep in mind that Edison has made this proposal because
2 Edison believes that it will receive significant value if its proposal is approved.

3

4 **Q. Please describe the negotiating posture of Edison and its ratepayers in**
5 **evaluating Edison's proposal.**

6 A. The negotiating positions of Edison and its ratepayers can be illustrated using a
7 hypothetical contract negotiation that includes uncertain costs, asymmetric
8 information and conflicting incentives. Assume that you are sitting on one side of
9 a table trying to negotiate a contract with another party and the following
10 conditions apply:

11

12 1) The contract you are negotiating is for current payments that you have to
13 make associated with dollar amounts that will be expended in the future, and
14 the ultimate amount of these expenditures could vary a great deal. In slightly
15 more technical terms, there is a high degree of variability in the cost.

16 2) The party sitting opposite from you has much more information regarding the
17 ultimate dollar level of expenditures as well as the variability associated with
18 future expenditures. In technical terms, there is asymmetric information.

19 3) The amount of future expenditures and the way in which the expenditures are
20 made has nothing to do with whether or not you sign the contract. In other
21 words, the contract itself has no effect upon economic efficiency – the
22 negotiation is only about transferring dollars through time and from one party
23 to another.

24 4) The party with whom you are negotiating has a strong incentive to receive
25 from you a dollar amount that is higher than the estimated cost level. If the
26 party opposite from you receives less than the ultimate costs, he will probably
27 have to eat those excess costs. On the other hand, if he receives more than the
28 actual costs, he may or may not have to refund the difference to you.

29

30 Now pretend that the party with whom you are negotiating makes you an offer. If
31 you accept the offer you can pay off all of the costs in a short period of time and

1 be relieved of any responsibilities in the future. Alternatively, if you reject the
2 offer, you can wait and see what the actual costs turn out to be.

3

4 **Q. How does the above analogy relate to Edison's proposal from the perspective**
5 **of the Commission and Edison's ratepayers?**

6 A. This is precisely the situation faced by the Commission and by Edison's
7 ratepayers, including those in the Coalition. The Commission and Edison's
8 ratepayers are being asked to give up their statutory right to wait and see what the
9 actual decommissioning costs turn out to be. By giving up this right, ratepayers
10 are faced with the "negotiating dilemma" that was described above.
11 Decommissioning costs are uncertain, Edison has far more information as to the
12 actual ultimate decommissioning costs than do ratepayers, Edison's proposal will
13 not effect the actual activities associated with decommissioning its plants, and,
14 Edison has a very strong incentive to assure that funding is adequate.

15

16 People faced with the negotiating dilemma as described above likely would prefer
17 to wait and obtain actual cost information rather than to accept the offer from the
18 other party. In other words, if the other party has more information and has the
19 incentive to charge you more than necessary, you would prefer to wait and see
20 what the actual costs turn out to be rather than make a deal.

21

22 This is demonstrated by considering the perspective of the party on the other side.
23 If the party has more information, if costs are uncertain, if the party has an
24 incentive to over-recover, and if the contract has nothing to do with actual
25 physical activities, the party would not make an offer that makes that party worse
26 off. If the party is better off, you are worse off, period. There is nothing in the
27 middle and there are no "win-win" scenarios. My testimony describes Edison's
28 proposal in this manner and explains why, absent some further demonstration by
29 Edison, the Commission should reject the proposal.

30

1 **Q. Please describe the various ways in which Edison, its affiliate and its parent**
2 **company and its shareholders would benefit from Edison's proposal.**

3 A. The Commission should not be misled by the rhetoric of Edison's witnesses. The
4 overall structure of Edison's proposal is designed to provide benefits to Edison,
5 not ratepayers or the Commission. Some of the benefits are obvious, others are
6 less so. Consider the following non-exhaustive list of benefits:

7 1) Edison has proposed to lock in decommissioning rates at a level that is
8 significantly greater than that which has been previously approved by the
9 Commission. Edison proposes to base recovery on the figure Edison proposed
10 in its 1999 decommissioning proceeding; this figure is approximately 45%
11 higher than the amount previously found to be just and reasonable by the
12 Commission. Because of Edison's timing in filing this proposal, there has not
13 been a Hearing Examiner's Proposed Order, much less a Commission Order,
14 finding that Edison's 1999 proposal is just and reasonable.

15 2) Edison and Exelon Genco would reap the benefits of any increased
16 efficiencies that come as a result of the merger of Unicom and PECO. Once
17 the merger is approved, Exelon by far will have the largest nuclear fleet in the
18 nation. All efficiencies of scope and scale would flow back to ratepayers
19 absent Edison's proposal.

20 3) Edison and Exelon Genco would benefit from any developments of new
21 decommissioning technology. Again, efficiencies resulting from new
22 technology normally would flow back to ratepayers.

23 4) Edison and Exelon Genco would receive a windfall even if Edison has
24 accurately estimated decommissioning expenses. Since Edison's last general
25 rate case Edison has included in its estimates a roughly 18% "Contingency
26 Factor." These funds were to be refunded to ratepayers in the event that
27 Edison had properly estimated actual decommissioning expenditures. Under
28 Edison's proposal, Exelon shareholders would receive this money.

29 5) Edison and Exelon Genco would receive an unnecessary anti-competitive
30 subsidy under Edison's proposal. The artificial allocation of

decommissioning expenses to captive ratepayers is unnecessary because of the manner in which Edison has depreciated its nuclear plants.

- 6) Edison and Exelon Genco would benefit from any extension in the years of operation of the nuclear plants. Absent Edison's proposal, ratepayers would be able to receive low-cost power if the plants are fully amortized and they continue to operate beyond their presently-anticipated life.
- 7) Edison and Exelon Genco would benefit from improved performance of the nuclear decommissioning trust fund. Ratepayers have seen previous reductions in decommissioning charges due to the returns that the fund has realized. Under Edison's proposal, higher returns will only mean higher dividends to Exelon shareholders.
- 8) Edison would no longer have the expenses associated with its annual Rider 31 proceedings. While these proceedings are extremely valuable to the Commission and ratepayers, the outcome of these proceedings do not impact Edison's bottom line.
- 9) Edison and Exelon Genco would benefit from any settlement with the United States Department of Energy ("DOE") of the pending suit regarding storage of spent nuclear fuel. PECO just recently settled with DOE, reportedly saving Pennsylvania customers at least **\$80 million over the next ten (10) years**. Exelon Genco would receive any settlement payment under Edison's proposal.
- 10) The Commission should investigate the impact that Edison's proposal would have upon Edison's Power Purchase Option (Market Value) tariff. If the wholesale contracts from the nuclear plants impact the market value in Edison's PPO(MV) tariff, they could artificially deflate the market value and increase the transition charges.
- 11) Edison and Exelon Genco would have a guaranteed stream of income. For six years, the Company would know that it would be receiving an identifiable stream of payments from its ratepayers. This could allow the Company to securitize this revenue stream.

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III.

RECOMMENDATIONS

Q. Please summarize your recommendations.

A. The Commission should reject or substantially modify Edison's proposal. If Edison is allowed to transfer its nuclear generation assets to Exelon Genco, then the Commission should either:

- (1) order Edison to hold a bid auction for its decommissioning liability and its decommissioning funds; or
- (2) develop an allocation methodology that attributes a fair share of the decommissioning costs to Exelon Genco and trues-up ratepayer contributions for decommissioning costs through refunds as new information arises.

Alternatively, if the Commission accepts the structure of Edison's proposal, the up front, increased ratepayer charges proposed by Edison should be eliminated.

Bid Auction For Decommissioning Liability

Q. How can a sales auction for decommissioning be used to resolve the "negotiating dilemma?"

A. The Commission could order Edison to put its future decommissioning work as well as the accumulated amounts in decommissioning trust funds up for auction. This means that Edison would allow other companies to perform the decommissioning work, take over the decommissioning trust funds and accept the risk that decommissioning costs will vary from the current expected levels. Such a sale auction is analogous to the way that some decommissioning liabilities have been transferred as a result of nuclear plant sales elsewhere in the country. The sales auction would solve the information asymmetry problem as well as the incentive problem that is discussed later in my testimony, and it would also provide ratepayers with an objective dollar amount for resolving the cost allocation issue between captive customers and Exelon Genco. In other words,

1 once the “market value” of decommissioning is established, the Commission
2 could allocate that amount on an equitable basis between captive ratepayers and
3 Exelon Genco.
4

5 *Allocation Of Costs To Exelon Genco With On-Going “True-Up”*

6 **Q. Describe the alternative of ratepayer’s retaining the right to have funding for**
7 **decommissioning adjusted as new information arises after Edison transfers**
8 **its nuclear plants to Exelon Genco.**

9 A. The Commission can allow Edison to avail itself of market pricing for the nuclear
10 plants and at the same time decide not to accelerate decommissioning payments or
11 to transfer decommissioning risk to Edison. In this case, ratepayers would retain
12 the right to have their rates adjusted as new decommissioning information
13 becomes available. Under such a framework, the Commission must explicitly
14 develop an allocation approach to separate the financial responsibility for
15 decommissioning between ratepayers and Exelon Genco. The allocation
16 methodology would determine ratepayer refunds (or additional contributions),
17 would account for historical contributions and fund earnings related to those
18 contributions, and it would also reflect the impact of new information about
19 decommissioning cost estimates. These calculations could be made in future
20 Rider 31 proceedings. For example, assume that the Commission was to
21 determine 60% of the decommissioning liability should be allocated to captive
22 ratepayers and 40% should be allocated to Exelon Genco. If new information in
23 the year 2010 were to suggest that ultimate decommissioning expenditures should
24 be substantially reduced, ratepayer refunds would be structured so that the
25 ratepayer contributions to decommissioning trust funds combined with the
26 ratepayer share of fund earnings produces 60% of the ultimate liability for
27 decommissioning costs. Since ratepayer funding is “front-loaded,” decreases in
28 cost estimates can result in significant refunds. This approach demonstrates that,
29 at least from a financial and economic perspective, the analysis of transferring
30 assets to a subsidiary company can be separated from analysis of pre-funding
31 decommissioning.

1
2 *Necessary Modifications If The Commission Adopts Edison's General Structure*

3 **Q. How should Edison's proposal be modified if the general structure of its**
4 **approach is adopted by the Commission?**

5 A. Because of the manner in which decommissioning costs are collected – charges to
6 current ratepayers for future uncertain costs – Edison's proposal should be
7 substantially modified if the Commission adopts the general framework of its
8 proposal. Accordingly, the following terms should be substituted for the terms
9 that Edison has proposed:

- 10
11 1) Customers should not be required to make any further decommissioning
12 contributions. However, if any level of continued contributions by ratepayers
13 is required, the payments should occur over a shorter time period than
14 Edison's proposal; a time period of two to four years would be more
15 appropriate.
- 16 2) Exelon Genco should not be allowed to remove any funds from the
17 decommissioning trust funds, except for paying costs associated with
18 decommissioning until all of the activities related to decommissioning its
19 nuclear units are fully completed.
- 20 3) The decommissioning collections by Edison from its ratepayers must be final
21 without any future recourse by Edison, or any of its subsidiary or affiliated
22 entities. Edison must not be allowed under any circumstance to ever ask
23 customers for the recovery of any decommissioning costs for its nuclear
24 plants.

1 IV.

2 THE COMMISSION SHOULD REJECT
3 EDISON'S PROPOSAL BECAUSE EDISON HAS PLACED THE
4 COMMISSION AND RATEPAYERS IN A NEGOTIATING DILEMMA
5

6 Q. Please describe how this section of your testimony on risk allocation relates
7 to your discussion on the allocation of decommissioning costs between captive
8 ratepayers and Exelon Genco?

9 A. Edison apparently believes there is little risk that the decommissioning obligations
10 will be allocated on a basis other than 100% to captive ratepayers. While
11 obviously the Commission should question that assertion, for purposes of this
12 section it is assumed that 100% of decommissioning obligations are the
13 responsibility of captive ratepayers. This assumption is made in order to focus
14 only on the issue of risk transfer and up-front payments for decommissioning.
15 Subsequent sections of my testimony will deal with issues associated with
16 allocation of decommissioning obligations between captive ratepayers and
17 Edison's shareholders.

18
19 The timing and risk transfer issues are analyzed in this section using the
20 hypothetical negotiating dilemma approach described above. As such, the
21 primary question is whether the four conditions that result in the "negotiating
22 dilemma" – cost uncertainty, information asymmetry, cost recovery incentives
23 and efficiency neutrality -- suggest that Edison's proposal is favorable.
24 Therefore, this section of my testimony discusses cost uncertainty, information
25 asymmetry, economic efficiencies, and recovery incentives as these issues relate
26 to decommissioning costs.

1 **Uncertainty of Costs**

2
3 **Q. Why is the fact that decommissioning costs are uncertain important to the**
4 **Commission's evaluation of Edison's proposal?**

5 A. If decommissioning costs (both the dollar costs and the impacts of earnings on
6 decommissioning funds) were known with certainty, the issues in this proceeding
7 would be greatly simplified. There would be no problem arising from asymmetric
8 information and the allocations between ratepayers and Edison's shareholders
9 would center on issues of prudence and economic cost allocation. It is the
10 uncertainty of decommissioning cost estimates that make the Edison proposal
11 complex from a regulatory and public policy perspective. If Edison's proposal is
12 not adopted and the Commission retains the annual rider 31 proceedings to review
13 estimated decommissioning charges, even if the estimates turn out to be wrong,
14 ratepayers or shareholders could ultimately be made whole by revising both
15 estimates and collections, as new information is available. However, under
16 Edison's proposal, if decommissioning costs and/or earnings on decommissioning
17 funds are lower than current estimates, ratepayers forgo the savings forever.

18
19 **Q. Does Edison acknowledge that there is significant uncertainty with respect to**
20 **decommissioning costs?**

21 A. Yes. However, Edison suggests that the only risk is that costs will be more than
22 the current expected levels and its witnesses do not seem to acknowledge the two
23 sided nature of risk. Edison does not discuss the possibility that decommissioning
24 costs will be lower than estimated, nor the possibility that the contingencies built
25 into the cost estimates will more than compensate for actual cost contingencies,
26 nor that rates of return on fund earnings will be higher than expected.

1 **Q. Is it possible that Edison’s decommissioning proposal will over-recover costs,**
2 **leaving ratepayers paying more for decommissioning than the costs that**
3 **Edison actually will incur?**

4 A. Yes. It seems inevitable that Edison believes that it would over-recover under its
5 proposal. Edison would have little or no incentive to make a proposal under
6 which it would not over-recover. If there were truly little variation around costs,
7 the fact that ratepayers are asked by Edison to give up the right to have their costs
8 revised if costs estimates change – especially if cost estimates decline – may not
9 be very important. However, even a very cursory review of decommissioning
10 cost estimates demonstrates a significant variation.
11

12 **Q. What evidence have you seen to suggest there is significant variation in**
13 **decommissioning costs?**

14 A. A study sponsored by the nuclear waste and decommissioning group of the
15 nuclear generation committee of Unipede showed that “cost estimates for the
16 same hypothetical reactor varied by a factor of six....” While some of the
17 variation was explained, that study also concluded that “costs will generally be
18 reduced if dismantling is deferred by some decades...it should cost less to
19 dismantle a PWR [Braidwood, Byron, and Zion] than a BWR [Dresden, Quad
20 Cities and LaSalle] of the same size, about 75% of the BWR estimate ... and it
21 should cost less to dismantle a two-unit plant than two one-unit plants.”
22 (*Nucleonics Week* – August 6, 1998.) In an earlier report written by
23 representatives of the nuclear industry, a similar variation in decommissioning
24 costs was observed. A report entitled “Decommissioning of Nuclear Facilities –
25 An Analysis of the Variability of Decommissioning Cost Estimates” published by
26 the Nuclear Energy Agency in Paris stated that “...however, large variations in
27 the published estimates for decommissioning have raised questions regarding the
28 reliability of present estimates. A recent comparison of decommissioning cost
29 estimates in the United States showed a variation by a factor of 4 between the
30 estimates.”
31

1 **Q. Is there any recent evidence of declining estimates for decommissioning?**

2 A. Yes. In *Nucleonics Week*, annual decommissioning charges were recently
3 reduced from \$24.8 million to \$16.7 million for the Connecticut Yankee plant.
4 Part of Entergy's transaction with New York Power Authority involved
5 reductions in estimated costs of decommissioning. Similarly, according to
6 *Nucleonics Week*, in the transaction involving Boston Edison's Pilgrim plant, the
7 following statement was reported: "While BECO estimated the costs of
8 decommissioning, Entergy figures it can do the job at a lower cost, based on its
9 experience with decommissioning Maine Yankee and the fact that it plans to
10 continue operating the facility for years to come, giving the trust fund time to
11 grow."

12
13 **Q. Mr. Randall Speck states that "Under ComEd's proposal, however,**
14 **collections from ratepayers will be fixed and may not be adjusted if fund**
15 **investments fail to achieve the projected returns (which are based on a recent**
16 **history of equity price increases.)" Do you agree that the risk associated with**
17 **fund earnings being different from expected levels is one sided?**

18 A. No. Edison assumes that 35% of decommissioning funds will be invested in
19 equity securities and the returns on these equity securities will be 11%. However,
20 in a response to CUB Data Request No. 22, Edison shows that the actual
21 proportion of funds invested in Equity securities has been 61.2% with a return of
22 21-28%. If future performance is anywhere near the recent performance, the
23 returns on the fund will be dramatically more than Edison's assumptions.
24 Edison's fund balance in equities at the end of 1999 was \$1.559 billion. *See*
25 *Edison Response to CUB Data Request No. 22.*) To consider the effect of higher
26 earnings rates, I note that if the return on these equity funds were 21% instead of
27 11% for one year, the differential fund earnings would be \$156 million. If Edison
28 experienced only three years of funding at these levels, the funding from the
29 higher returns would be more than Edison's asserted \$1 billion non-present-
30 valued savings.

1 **Q. How are the ratepayer contributions to decommissioning funds affected by**
2 **the rate of return on invested funds?**

3 A. Given the large amount that is already invested in the funds and the length of time
4 until disbursements occur, small changes in the rate of return on invested funds
5 can have a very large impact on the amount of funding required. For example, if
6 the return on the funds increases by only 0.5% per year, then the required funding
7 by ratepayers shown in Edison's response to CUB Data Request No. 11 falls by
8 44% -- from \$968 million to \$541 million. In present value terms, the ratepayers
9 would only be obligated to pay \$450 million.

10
11 **Information Asymmetry**
12

13 **Q. Why is asymmetry of information an important issue in this case?**

14 A. If ratepayers and the Commission had the same amount of information on future
15 decommissioning cost estimates as does Edison, then even if costs were uncertain,
16 the Commission could judge whether ratepayers should accept the risk that
17 ultimate decommissioning costs will be less than amounts currently estimated by
18 Edison. In such a case, the fact that ratepayers are giving up the right to have
19 charges revised as better information becomes available would not be nearly as
20 important. However, since Edison has more information than ratepayer
21 representatives and since it is in Edison's financial interest to overestimate costs,
22 giving up the right to revise charges with new information puts the Commission
23 in a very difficult position. The Commission either can accept Edison's costs --
24 somewhat blindly -- or it must make an alternative assessment on a very complex
25 subject where it is natural that Edison has more information.

26
27 **Q What is your basis for suggesting that Edison has more information on**
28 **decommissioning than other parties?**

29 A. While I have a great deal of respect for other experts in this case who will testify
30 on behalf of Cook County, CUB, the City of Chicago, the Attorney General and
31 the Commission Staff, Edison has many unique information advantages. First,

1 Edison itself will ultimately perform the decommissioning. Edison will know
2 how its own management plans with respect to decommissioning and financial
3 management of decommissioning funds affect funding requirements. Second, in
4 combination with PECO, Edison will be the largest nuclear operator in the
5 country by a substantial margin. Not only will the company realize economies of
6 scale and learning curve benefits it will also use the significant staff and resources
7 it will have available to assess productivity improvements and technical
8 innovations in decommissioning. Just as important, the combined company
9 Exelon will attract vendors of decommissioning services who will presumably –
10 because of competitive forces – keep Edison completely up to date with respect to
11 decommissioning costs, technologies and strategies. In sum, even if Edison claims
12 to be providing an unbiased estimate to the Commission, it is not hard to imagine
13 that Edison has much more information on the subject of decommissioning its
14 own plants than other parties.

15
16 **Q. Has Edison acknowledged that it has substantial information on**
17 **decommissioning costs that is not available to ratepayers?**

18 A. Yes. In the 1999 Annual Rider 31 proceeding, Edison witness Mr. Michael
19 Lyster stated that “ComEd devotes extensive resources to decommissioning of its
20 nuclear stations.... ComEd performs all of these activities through highly trained
21 and experienced personnel assigned to its Nuclear Generation Group.” (Edison
22 Witness Direct Testimony at 5.) Additionally, in response to a data request, in the
23 Instant proceeding Edison stated: “ComEd’s decommissioning personnel are
24 familiar with technological developments that relate to decommissioning, and
25 would be aware of any emerging technological innovations that would
26 substantially decrease decommissioning costs.” (Edison Response to CUB Data
27 Request Number 8.) Edison has a great deal of information on decommissioning;
28 it is extremely unlikely that ratepayer interests could possibly have the same
29 information.

1 **Cost Recovery Incentives**

2
3 **Q. Describe Edison's financial incentives with respect to recovery of**
4 **decommissioning cost?**

5 A. Edison has a strong incentive under its proposal to over-recover from ratepayers.
6 Under the Edison's proposal, if the amounts in Edison's decommissioning fund
7 are not sufficient to pay all its costs, Edison will not collect deficiencies from
8 ratepayers. However, if the amount in the decommissioning fund exceeds the cost
9 of decommissioning, Edison keeps that money. Absent Edison's proposal, Edison
10 would be obligated to refund that money to ratepayers. However, under the
11 Edison proposal there is no refund obligation and Edison gets a windfall.
12

13 **Q. Why are incentives more important in the instant proceeding than in**
14 **previous decommissioning cases?**

15 A. Perhaps this is best understood using a concrete example. In a previous Rider 31
16 proceeding, a witness sponsored by the Cook County State's Attorneys Office,
17 proposed elimination of any contingency factor, which amounted to a
18 decommissioning cost reduction of \$744 million. (See Cook County Witness
19 Peter Strauss Direct Testimony, ICC Docket No. 97-0110.) its decision in that
20 case, the Commission did not accept that recommendation. To analyze Edison's
21 incentives, assume that Mr. Strauss turned out to be correct and the contingency
22 factor was, in fact, not necessary. If Edison's proposal is not accepted, then, at
23 some point in the future, it would become clear that there is too much money in
24 the decommissioning trust funds. This future point in time may be before or
25 during the actual decommissioning of plants, but there is no question that as more
26 time passes, better information becomes available. If it became clear that the
27 contingency factor should not have been included, the Commission would,
28 assuming Edison's proposal is not accepted, give future ratepayers a refund for
29 their contributions plus the accumulated interest on their contributions.
30

1 On the other hand, if Edison's proposal is accepted, the decision on the
2 contingency factor is more significant from a ratepayer perspective. Now, if the
3 Commission was wrong in rejecting Mr. Stauss' recommendation, the allocation
4 is not between current and future ratepayers but between current ratepayers and
5 Edison. Edison's shareholders would pocket the \$744 million, plus interest.

6

7 **Economic Efficiency Effects on Decommissioning Outlays**

8

9 **Q. Why is the fact that Edison's proposal will not change the manner in which**
10 **decommissioning is ultimately performed relevant to this case?**

11 A. If Edison's proposal changed the manner in which decommissioning was actually
12 performed, there may be some economic advantages to both sides that could be
13 available from the proposed deal. If, for example, Edison's had proposed to have
14 ratepayers fund a technological development that was guaranteed to reduce
15 decommissioning costs by decommissioning \$2 billion, the savings could be split
16 between ratepayers and Edison and provide a mutually beneficial arrangement.
17 However, such a mutually beneficial situation does not exist under Edison's
18 proposal. Edison's actions in actually decommissioning the plants should not
19 change based upon Edison's proposal.

20

21 To contrast decommissioning with other situations, consider the example of
22 negotiating a new coal contract or a new long-term purchased power agreement.
23 In these cases, there can be efficiency savings from changing the way a mine
24 operates or a plant dispatches. Similarly, in the case of establishing competitive
25 markets for generation, there may be efficiency gains that both pay off stranded
26 investment and lower rates for ratepayers. In the case of decommissioning,
27 Edison's proposal should not impact either the ultimate procedure by which
28 Edison decommissions the plant, or the dollar amount of expenditures Edison
29 makes in decommissioning the plants, or the investment strategy Edison uses for
30 the decommissioning fund.

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Q. Why do you believe that Edison’s proposal will not change the manner in which decommissioning is ultimately performed?

A. The way in which Edison’s nuclear plants are decommissioned and the assurance that the decommissioning trust fund will be used for actual expenditures will presumably be regulated by many State and Federal agencies. Although Edison’s incentives would change under its proposal, it is unlikely that Edison could engage in significantly different practices with respect to the physical decommissioning of its plants merely because the plants are owned by an affiliate.

Q. Do you agree with Edison’s assertion that it will change the manner in which it makes investments to its decommissioning trust fund as a function of Commission approval of its proposal?

A. No. Edison witness Berdelle states that “the Genco will have additional flexibility to manage fund investments to maximize risk-adjusted earnings and to make contributions to trust funds at appropriate times.” (*See* Edison Witness Berdelle Supplemental Testimony at 14.) However, in making fund investments, either Edison, the Genco, the NRC or the Commission must assess tradeoffs between risk and return. As with any investment, increasing returns comes only with a cost of increased risk. If the increased risk were worthwhile for the Genco, it would presumably also be worthwhile for ratepayers, if Edison’s proposal is not adopted. The NRC and the State of Illinois have an interest in assuring that funds are available in the trust because of the possibility of bankruptcy of corporations. This public policy interest, and therefore the riskiness of fund investments, does not change because of Edison’s proposal.

1 **Summary of Risk Transfers and the “Negotiating Dilemma”**

2
3 **Q. Please summarize why you believe that the uncertain costs, information**
4 **asymmetry, incentives and economic efficiency results in a “negotiating**
5 **dilemma” from the perspective of ratepayers.**

6 A. Edison would have the Commission believe that out of the goodness of its heart it
7 is not acting in the interests of its shareholders, but that it is instead giving \$1
8 billion to ratepayers. The Commission is put in the position of either believing
9 this statement or coming up with an alternative proposal. Because of information
10 asymmetry and Edison’s incentives, a better alternative would be to let the market
11 determine the value of the decommissioning liability compared to the fund
12 balances in the decommissioning trusts. This could be done through having other
13 companies bid on a competitive basis for performing the decommissioning work
14 as well as managing the decommissioning fund balances.

15
16
17 **V.**

18 **EDISON MISREPRESENTS THE ASSERTED SAVINGS TO RATEPAYERS**

19
20 **Q. Edison asserts that ratepayers would save \$1 billion under its proposal. How**
21 **does Edison compute this savings estimate?**

22 A. Edison’s assertion that its proposal would save ratepayers \$1 billion amounts to
23 little more than financial smoke and mirrors. Edison’s estimated \$1 billion
24 savings is documented in its response to CUB’s Data Request Number 37. In that
25 response, Edison adds estimated funding that would supposedly have to be made
26 by ratepayers from the year 2007 to 2028 on a nominal basis *without any present*
27 *value adjustment*. Edison’s non-present-valued figure is \$998 million. Edison’s
28 asserted savings analysis also *assumes that captive ratepayers are responsible for*
29 *100% of the decommissioning expenses*, even if much of the life span of the
30 nuclear plants is spent earning profits for the unregulated generating subsidiary.
31 Finally, Edison **improperly asserts that avoiding future Rider 31 proceedings**

1 **is a benefit to ratepayers**, even though those proceedings are the primary means
2 for the Commission and ratepayers to obtain updated information regarding
3 decommissioning cost estimates.
4

5 **Q. How does the \$1 billion savings estimate compare to other data provided by**
6 **Edison in response to data requests?**

7 A. In response to CUB Data Request Number 1, Edison states that the current
8 present-valued remaining contributions to the decommissioning fund are \$1
9 billion. This, of course, is very different from the non-present-valued \$1 billion
10 asserted savings estimate. Through analysis of Edison's prospective funding
11 estimates (using Edison's data), the \$1 billion in present value terms to the year
12 2000 actually is only **\$392 million**. Thus, simply making the "present value"
13 adjustment to Edison's asserted savings proposal reveals that, accepting all of
14 Edison's figures and calculations, its proposal would "save" ratepayers less than
15 \$392 million, not the \$1 billion tattooed throughout Edison's testimony.
16

17 **Q. Could you please further explain the actual dollar amounts that are at issue**
18 **in the instant proceeding?**

19 A. Certainly. To evaluate alternative allocation assumptions between captive
20 ratepayers and Exelon Genco, it is appropriate to split the present value of
21 decommissioning contributions into three "pots," using Edison data. The first
22 "pot" is the current value of the decommissioning trust as of January, 2000 from
23 ratepayer contributions. The second "pot" is the present value to the year 2000 of
24 the amount that Edison is requesting from ratepayers through the end of 2006.
25 The third "pot" is the present value to 2000 of the amount that supposedly would
26 be the responsibility of Exelon Genco under Edison's proposal. Using data
27 provided by Edison in response to data requests, the three "pots" break down as
28 follows:

Present Value (Year 2000) of Decommissioning Funding		
	\$ Millions	Percentage
Pot 1: Ratepayer Funded before 2000	\$ 2,548.00	71.8%
Pot 2: Ratepayer Funding 2000-2006	\$ 608.20	17.1%
Pot 3: Genco Funding After 2006	\$ 391.80	11.0%
Total	\$ 3,548.00	100.0%

This table does not consider the contributions made by ratepayers prior to establishment of the funds. Further, these estimates are purely derived from Edison's own data, including the discount rate assumption. The present-valued amounts in this table include all of the dollar amounts that will have to be outlayed by customers and/or Exelon Genco. The rest of the money used to pay for Edison's nominal decommissioning costs are derived from earnings on the Trust funds that contain these contributions.

Q. Please describe issues associated with whether amounts in "Pot 3" will actually be necessary.

A. The \$391.8 million in "pot 3" is an important number because it is the supposed savings that ratepayers would achieve under Edison's proposal. However, it is unclear whether Edison itself believes such additional expenditures would be necessary. In fact, there is a significant question as to whether Edison itself believes this level of funding would be required. In response to CUB Data Request Number 1, Edison states: "The proposed arrangement does not require the Genco to immediately supplement contributions to the decommissioning trusts. Rather, the Genco would periodically evaluate whether additional contributions are required . . . if a decommissioning shortfall were deemed to exist, Genco would be required to supplement the trusts."

Edison has provided information on how it intends to meet the nominal decommissioning cost disbursements through dollar amounts that have been accumulated in its decommissioning funds. (See Edison's Response to CUB Data Request No. 11.) This Response shows that Exelon Genco, in fact, does not make any funding contributions whatsoever. Edison's calculations also show that

1 assuming Exelon Genco makes no contributions, the decommissioning trust fund
2 allows Edison to spend \$14.673 billion on a nominal basis.

3
4 **Q. How does the savings purported by Edison change if different allocations**
5 **between captive ratepayers and Exelon Genco are assumed?**

6 A. If the assumption is made that Exelon Genco should be allocated some of the
7 decommissioning obligations, Edison's asserted \$1 billion savings not only
8 disappear, but the savings are instead substantial costs.

9
10 **Q. Could you please illustrate the impact that requiring Exelon Genco to**
11 **assume some of the costs would have upon the financial analysis of Edison's**
12 **proposal.**

13 A. Yes. To illustrate the impact of allocating decommissioning costs to the
14 unregulated generating company, I have assumed that the decommissioning
15 liability is allocated on the basis of the total number of years that a plant operates.
16 Using the current license expiration dates (except for Zion and Dresden 1, where
17 actual retirement dates were used), the thirteen plants will have a total
18 accumulated life of 462 years. If Edison's proposal is adopted, the plants can
19 realize market profits beginning in the year 2005. Significantly, in 2005, Edison
20 could reinstate its fuel adjustment clause and Edison could be allowed to charge
21 ratepayers market-based rates, since it would have moved its plants to the
22 unregulated company. This means that for a total of 138 total plant years, the
23 plants will charge market prices to ratepayers and potentially provide Edison
24 shareholders with returns substantially above regulated returns. On this
25 "percentage of total life" basis, 29.87% of the lifetime of the nuclear plants is
26 allocated to the generating subsidiary and 70.13% of the lifetime of the plant's life
27 is allocated to captive ratepayers. Using Edison's cost estimates of
28 decommissioning and fund earnings rates along with these allocation percentages,
29 the purported savings become a cost of \$668 million in present value as shown in
30 the table below:

Ratepayer Costs Assuming No License Extension	
Year 2000 Dollars in Millions	
Total Decommissioning Funding	\$ 3,548.00
Allocation to Ratepayers	\$ 2,488.21
Allocation to Genco	\$ 1,059.79
Payments by Ratepayers	\$3,156.20
Cost of Edison Plan to Ratepayers	\$668.00

2

3 **Q. How does the savings purported by Edison change if different license**
 4 **extensions are assumed for some of the nuclear plants that have not been**
 5 **retired?**

6 A. The Commission should consider the cost of Edison's proposal to ratepayers
 7 under alternative assumptions with respect to how many years the nuclear plants
 8 operate. If the lifetime of the nuclear plants is extended, then the plants will have
 9 more years operating in the unregulated subsidiary relative to the regulated
 10 company. In this case, more of the decommissioning liability should be allocated
 11 to Exelon Genco and less should be allocated to captive ratepayers. If half of
 12 Edison's plants have a license extension of 10 years, then 36.72% of the plant life
 13 is allocated to Exelon Genco. Alternatively, if half of Edison's plants have a
 14 license extension of 20 years, then 42.35% of the plant's life is allocated to
 15 Exelon Genco. Ratepayer costs become \$911 million and \$1.11 billion in present
 16 value terms under the two alternative license extension scenarios.

17

18 **Q. Edison's witnesses have emphasized the administrative savings that can be**
 19 **achieved from avoiding future Rider 31 cases. Do you believe cost savings**
 20 **from avoiding these cases offset the benefit from acquiring better**
 21 **information on decommissioning costs?**

22 A. No. Given the significant public policy issues associated with decommissioning,
 23 the billions of dollars of ratepayer money invested in decommissioning funds, and

1 the uncertainty associated with cost estimates, the benefits associated with
2 obtaining updated decommissioning information far outweighs relatively
3 insignificant administrative costs that come from Rider 31 proceedings. Because
4 decommissioning has such significant public policy impacts, Edison's discussion
5 of administrative cost savings from avoiding Rider 31 proceedings is, at best,
6 irrelevant.

7
8 **Q. Do you believe the administrative savings touted by Edison's witnesses are**
9 **significant from a ratepayer perspective?**

10 A. Absolutely not. The lack of information involving future decommissioning is a
11 major problem with establishing appropriate public policy. Unlike most other
12 cost of service items, decommissioning costs have a high degree of variability and
13 will not be incurred for many years into the future. If the cost estimates change,
14 decommissioning funding should change and ratepayers should have their electric
15 bills adjusted accordingly. If Edison's proposal is not adopted and Edison does
16 not hold a sales auction for decommissioning, it is very important for ratepayers --
17 through the Commission proceedings -- to keep abreast of improved and more
18 reliable information.

19
20 **Q. Can you provide a specific example of how Rider 31 proceedings can benefit**
21 **ratepayers?**

22 A. Yes. The strong performance of the stock market, all else equal, should have
23 resulted in significant decreases in future ratepayer funding requirements. To
24 illustrate this point, it is assumed that in the first year of the funding analysis the
25 7.5% rate of return doubles. (See Edison Response to CUB Data Request No. 11.)
26 The doubling of a single year of earnings causes the remaining future funding
27 requirements by ratepayers over all future periods to fall by 30%. Should the
28 Commission opt to retain ratepayer's rights to have funding requirements adjusted
29 as new information arises -- and to allocate appropriate amounts of
30 decommissioning to Exelon Genco -- this is the type of information that will
31 benefit ratepayers in Rider 31 proceedings.

1
2 **Q. Please summarize your financial analysis of Edison's asserted \$1 billion**
3 **savings to ratepayers under its proposal.**

4 A. Edison's assertion that its proposal would save its ratepayers \$1 billion is
5 misleading, at best. Edison's \$1 billion in asserted savings is deflated to less than
6 \$392 million merely by stating the savings in present value terms. That "savings"
7 is eliminated if any one of a number of assumptions is adjusted. For example, if
8 the Commission determines that Exelon Genco should be responsible for even a
9 fraction of the decommissioning expenses, the calculations reveal that Edison's
10 proposal actually would result in an increase in costs to ratepayers. Further, the
11 Commission should bear in mind that Exelon Genco will have every incentive to
12 try to extend the lifetime of these plants. Under Edison's proposal, ratepayers
13 would not benefit from this extension. In short, Edison's asserted savings of \$1
14 billion just as easily could be a cost of \$1 billion to ratepayers.

Ratepayer Costs Assuming 10 Year Liscense Extension on Half of Non-retired Nuclear Plants		Ratepayer Costs Assuming 20 Year Liscense Extension on Half of Non-retired Nuclear Plants	
Total Decommissioning Funding	\$ 3,548.00	Total Decommissioning Funding	\$ 3,548.00
Allocation to Ratepayers	\$ 2,245.22	Allocation to Ratepayers	\$ 2,045.47
Allocation to Genco	\$ 1,302.78	Allocation to Genco	\$ 1,502.53
Payments by Ratepayers	\$3,156.20	Payments by Ratepayers	\$3,156.20
Cost of Edison Plan to Ratepayers	\$910.98	Cost of Edison Plan to Ratepayers	\$1,110.74

21
22 **Q. Why have you considered the impact of nuclear license extensions?**

23 A. To date, Edison has not made a firm and unequivocal commitment that it will not
24 seek any license extensions for its nuclear plants.

1 VI.

2 **THE COMMISSION SHOULD ALLOCATE A PORTION OF**
3 **THE DECOMMISSIONING EXPENSES TO EXELON GENCO**
4

5 **Q. What is the basic presumption of your testimony with respect to cost**
6 **allocation between ratepayers and Exelon Genco?**

7 A. My testimony relating to allocation of decommissioning costs between Exelon
8 Genco and captive ratepayers focuses on whether Edison needs captive ratepayers
9 to incur the full decommissioning liability from a financial perspective in order to
10 profitably sell power from its nuclear plants at market prices. My testimony
11 accounts for Edison's acceleration of depreciation (and amortization) on their
12 nuclear plants that has resulted in a low book value and discusses the cash flow
13 Edison can potentially realize from selling power on an unregulated basis as
14 compared with cash flows that would result from the Company using embedded
15 cost ratemaking at the lower book value. The "transfer price" Edison uses in
16 transactions between itself and the Exelon Genco is not important in this analysis.
17 Rather, the total cash flow received by Edison in a scenario where nuclear plants
18 are subject to embedded cost regulation after the rate freeze period compared to
19 cash flow in a market price scenario is all that is relevant in this part of the
20 analysis.

21
22 **Q. Are you suggesting that Edison should not receive market pricing on its**
23 **nuclear plants or that Edison should not transfer the decommissioning cost**
24 **risk away from ratepayers?**

25 A. No. My testimony relates to the price that ratepayers should pay for Edison's
26 acceptance of decommissioning risk and the liabilities that ratepayers should incur
27 in order to facilitate market pricing from the nuclear plants. To be sure, Edison's
28 proposal to accept decommissioning cost risk and to use market pricing on its
29 nuclear plants sounds pretty good. However, Edison fails to disclose that there is a
30 very high price tag for ratepayers under its proposal. This price tag involves
31 ratepayers incurring virtually all of the financial liability for the expected
32 decommissioning cost of the nuclear plants (instead of Exelon Genco) and

1 ratepayers forgoing the ability to benefit from improved information on the
2 ultimate actual cost of decommissioning. My testimony demonstrates that unless
3 the price tag is reduced significantly, Edison's proposal is a value-enhanced deal
4 for Edison and its shareholders and a costly deal for ratepayers.

5
6 **Q. How did you arrive at your recommendation that if the structure of Edison's**
7 **proposal is adopted, the up-front price tag should be zero?**

8 A. This analysis can be simply done using Edison's own data, and attributing an
9 equitable share of the financial obligations of decommissioning to Exelon Genco.
10 Assuming no license extensions, and allocation using the lifetime of the plants,
11 70% of the life of Edison's nuclear fleet can be allocated to captive ratepayers and
12 30% to Exelon Genco. However, after accounting for fund earnings, and making
13 the favorable assumption from Edison's perspective that 11% more
14 decommissioning disbursements occur than are in Edison's Response to CUB
15 Data Request Number 11, ratepayers have already contributed more than 70% of
16 the required decommissioning funding. If ratepayers have already paid 70% of
17 the cost and ratepayers should be allocated 70% of the decommissioning cost, this
18 obviously means that no additional ratepayer funding is necessary.

19
20 **Q. Upon what basis does Edison suggest that all decommissioning costs should**
21 **be allocated to captive ratepayers and none should be allocated to Exelon**
22 **Genco?**

23 A. The ultimate foundation of Edison's argument is the assumption that collection of
24 all decommissioning costs from captive ratepayers is necessary to compensate
25 Edison for financial risks associated with transferring the plants to an unregulated
26 subsidiary. Edison witness, Speck states: "By permitting limited continuing
27 collections from ratepayers to supplement the existing decommissioning funds,
28 the Commission will promote the transfer of the nuclear plants to a competitive,
29 unregulated Genco, thereby benefiting power consumers. ComEd's proposal will
30 facilitate moving a significant portion of Illinois' power generating capacity from
31 regulated to unregulated." (See Edison Witness Speck Direct Testimony at 23.)

1 Mr. Speck suggests that Edison requires alleviation of the financial burdens
2 associated with decommissioning to move power “from regulated to unregulated.”
3 (*See id.*) Thus, to evaluate the reasonableness of Edison’s proposal to allocate all
4 decommissioning costs to captive ratepayers, the Commission should analyze
5 whether Edison, in order to operate its nuclear plants profitably on a market basis,
6 needs to be relieved from financial responsibility for decommissioning.

7

8 **Q. Given the way in which the Illinois electric utility industry has been**
9 **restructured, is it valid for Edison to request that it be allowed to recover**
10 **decommissioning expenses once the assets are transferred to Exelon Genco?**

11 A. No. Edison’s request for financial incentives is much like a request for additional
12 stranded investment recovery. Mr. Speck testifies that decommissioning costs are
13 essentially sunk costs much like the investment cost of the plants themselves.
14 Beginning on page 20 of his direct testimony, Mr. Speck states that “ComEd
15 undertook to build and operate its nuclear power plants in a fully regulated
16 environment, and the obligation to decommission the plants *fully* accrued under
17 that same regime. Thus, ratepayers became obligated to fund decommissioning of
18 ComEd’s nuclear plants while those plants’ were regulated. It is appropriate for
19 ratepayers to continue to fulfill at least part of that pre-existing decommissioning
20 obligation even though title to the nuclear plants passes to the unregulated Genco”
21 (*See Edison Witness speck Direct Testimony at 20-21.*) (Emphasis added.)

22

23 Because Edison seeks to accelerate recovery of decommissioning costs and wants
24 to impute very little of the decommissioning cost, if any, to its Exelon Genco
25 subsidiary, Edison’s position is tantamount to requesting additional stranded
26 investment recovery over and above the “lost-revenue” based transition charges
27 that are allowed under the Public Utilities Act. Being alleviated of the financial
28 liability related to decommissioning, the nuclear plants likely would have
29 embedded costs that are below market prices. Stated differently, the low
30 embedded costs in later years of a plant’s life -- after the plants have been
31 substantially depreciated – should result in an off-set to stranded investment,

1 because embedded costs would be below market prices. If Edison receives a
2 higher cash flow from selling power to ratepayers at market prices than it would if
3 it charges embedded cost and it also has already recovered its decommissioning
4 liability, Edison and its shareholders would in a sense recover stranded investment
5 related to decommissioning twice.

6

7 **Q. How can the issue of whether from a financial perspective Edison needs**
8 **ratepayers to pay all decommissioning costs be assessed?**

9 A. One way to consider the issue of whether Edison needs to recover all of its
10 decommissioning costs through charges to captive ratepayers is to compare
11 Edison's cash flow if its nuclear plants were subject to embedded cost regulation
12 after 2005, with the cash flow Edison would receive if it charged ratepayers at
13 market prices for power produced by the nuclear plants. If the nuclear plants earn
14 more cash flow for Edison as an entire corporate entity on a market basis – after
15 inclusion of Exelon Genco's allocated share of decommissioning funding – the
16 root cause of Edison's financial need argument ceases to exist. In this situation,
17 where Edison's cash flow is higher on a market basis than a regulated basis, the
18 Company does not require allocation of decommissioning liability to captive
19 ratepayers in order to, as Mr. Speck states, "promote the transfer" of the nuclear
20 plants to an unregulated subsidiary company.

21

22 **Q. By comparing Edison's cash flow on a market basis to Edison's cash flow on**
23 **a regulated basis, are you suggesting the Commission should not allow**
24 **Edison to transfer its plants to an unregulated subsidiary?**

25 A. Absolutely not. My discussion only addresses whether Edison needs financial
26 incentives through allocation of decommissioning liability to captive customers in
27 order to facilitate subjecting the plants to market prices.

28

29

1 **Q. Have you developed a detailed cash flow analysis to evaluate whether it is**
2 **necessary to allocate all decommissioning costs to captive ratepayers?**

3 A. No. However, the issue of required financial incentives can be evaluated without
4 a detailed analysis by considering:

- 5 • the remaining book value of Edison's nuclear plants after 2005;
- 6 • the financial condition of Edison during the transition period;
- 7 • Edison's accounting adjustments that allow Edison to keep its earnings
8 below the return on equity cap provision of the original Act; and
- 9 • statements made by Edison's management with respect to the economics
10 of the plants.

11 In addition, I consider the fact that when a capital investment has minimal book
12 value, asset managers have the option to shut down the plant without major
13 financial impacts. In Edison's situation, this means that Exelon Genco could shut
14 down the nuclear plants if market prices are not high enough to pay for fuel costs
15 and operation and maintenance expenses without incurring overwhelming
16 financial consequences. On the other hand, if market prices are high, the plants
17 have the potential for a very big upside. Stated differently, Edison has structured
18 things so that it has a small downside and a large upside. Taken together, these
19 factors imply that Edison's cash flow after the year 2005 will probably be much
20 higher if it charges market prices for its nuclear power to remaining captive
21 customers instead of being faced with rates derived from the embedded cost of the
22 plants.

23
24 **Q. Why should the issue of whether Edison needs to allocate all of its**
25 **decommissioning liability to captive ratepayers from a financial perspective**
26 **be evaluated by comparing market prices with embedded cost after 2005**
27 **rather than analyzing transfer prices from Edison to Exelon Genco?**

28 A. Through operation of an unregulated generating subsidiary company, Edison's
29 customers who continue to receive bundled service into the distant future will lose
30 the option to receive power from the nuclear units at embedded cost. If Edison
31 did not create a structure which enables it to charge market prices to bundled

1 customers, the Company would, at some point, presumably file a rate case that
2 would include recovery of the remaining nuclear plants as well as allocations to
3 bundled service customers for the costs of the nuclear plant.

4 The rate freeze period in the Act covers a period through January 1, 2005. (*See*
5 220 ILCS 5/16-111(a). Before that date, any “shell games” related to transferring
6 plants to the subsidiary do not affect Edison’s cash flow or payments made by
7 ratepayers. Before 2005, ratepayers’ electric bills and Edison’s cash flow are
8 derived from frozen rates no matter how Edison alters its corporate structure.
9 After January 1, 2005, if the option to receive power at embedded cost is lost, and
10 ratepayers must still pay for Exelon Genco’s decommissioning obligations,
11 Edison has effectively transferred the assets to an unregulated subsidiary without
12 including liabilities associated with those assets. No ratepayer electric bills nor
13 Edison cash flows depend upon the transfer price between Edison and its
14 subsidiary, Exelon Genco.

15
16 **Q. Please elaborate on why Edison’s nuclear plants will probably be able to**
17 **produce power at embedded costs below market prices in the later portions**
18 **of their life?**

19 A. One of the primary reasons that Edison’s nuclear plants have not been economic
20 in the past vis-a-vis competitively determined market prices for power is their
21 high investment cost. However, through its impairment and amortization policies,
22 Edison will have written down the plant to very low levels by the time the plants
23 charge market prices to ratepayers (i.e. after 2005). Edison’s writedown of book
24 value to maintain earnings below the cap is explained as follows in its annual
25 report:

26
27 In 1998, ComEd recorded a plant impairment of approximately \$3
28 billion resulting in a reduction in plant assets and the creation of a
29 regulatory asset. The regulatory asset will be recovered through
30 regulated cash flows over a transition period that extends through
31 2006. Accordingly, the impairment had no effect on results of

1 operations in 1998. ComEd amortized approximately \$2.6 billion
2 of the regulatory asset in 1999, substantially related to the fossil
3 plant sale noted above.”
4

5 Thus, by the time the plants charge market prices, \$3 billion of book value will be
6 amortized in addition to the plants’ normal depreciation expense. In 1991, the net
7 book value of Edison’s nuclear plants was \$10.37 billion excluding accumulated
8 depreciation related to decommissioning. In 1999, the net book value reported in
9 Edison’s FERC Form 1 was \$6.78 billion. This 1999 amount does not appear to
10 include reduction related to the plant impairment study because the gross plant
11 value was \$13.660 billion at the end of 1998 and \$13.826 billion at the end of
12 1999. According to Edison’s 1999 FERC Form 1, by 2005, the net book value of
13 Edison’s plants will be reduced by another \$1.48 billion for depreciation and
14 amortization charges. If the \$3 billion in plant impairment is also deducted from
15 book value, Edison’s book value in the beginning year of which the plants are
16 subject to market prices will be about \$2.3 billion. This net book value would be
17 the primary component of rate base if Edison used embedded cost ratemaking for
18 the remaining bundled customers.
19

20 **Q. From an operating perspective, can Edison’s nuclear plants generate**
21 **significantly positive cash flow if they are subject to market prices?**

22 A. Edison seems to believe they can. Edison states that the plants will have “low
23 cost” and increased value in the following statements that it makes to shareholders
24 in its annual report:
25

26 “Exelon will emerge as a leader in both the competitive generation
27 market and the burgeoning power marketing business. ComEd’s
28 ten-unit nuclear fleet will become an integral part of a strong, low-
29 cost generating base and will help fuel Exelon’s power marketing
30 arm. Consistent with the aggressive and financially disciplined
31 acquisition strategy PECO has been executing over the last several
32 years, Exelon will continue to expand its generation portfolio as
33 well as its service boundaries. “
34

1 “Next, it makes ComEd’s Nuclear Generation Group a vital part of
2 a vastly larger generation business – one that will continue to grow
3 under the direction of Oliver Kingsley, who will remain as Chief
4 Nuclear Officer. The value of ComEd’s generation fleet, which has
5 increased significantly under Kingsley’s leadership over the last
6 two years, will be enhanced further by the power marketing
7 business already well established at PECO. ”
8
9

10 **Q. If Edison transfers its nuclear plants to an unregulated subsidiary company,**
11 **why do you believe there is a significant upside to Edison and therefore a**
12 **downside to ratepayers?**

13 A. Consider Edison’s options after January, 1 2005. From a financial standpoint,
14 Edison will have the option to continue operating the plants or to close them if
15 they produce negative incremental cash flow. Without allocation of
16 decommissioning liability, cash flow from the plants will be derived primarily
17 from earning market revenues above their “to-go” operation, maintenance, fuel
18 costs and property taxes. If the plants cannot earn sufficient revenues to meet
19 these costs, then because the plants have a small book value, the financial
20 consequences associated with closing the plants is limited to the write-off
21 associated with the remaining book value. On the other hand, if market prices are
22 above the sum of operation and maintenance costs and fuel costs, the financial
23 upside may be very significant. This is a good deal for Edison shareholders –
24 limited downside and a large upside.
25

26 **Q. Could you please illustrate how Edison’s shareholders could benefit?**

27 A. Yes. Some very simple numbers illustrate the potential upside to Edison’s
28 shareholders. Assume that operation and maintenance on Edison’s nuclear plants
29 including allocated administrative expense and property tax is \$200/kW – a rather
30 high number by industry standards. Assume also that incremental fuel costs for
31 the nuclear plants is \$7/MWH – another rather high number. In this scenario, if
32 the plants operate at an 85% capacity factor, their total cost is \$26.41/MWH.
33 Market prices, as calculated for purposes of establishing market value credits,
34 range from \$36/MWH to \$47/MWH for the various different customer classes. If

1 market prices are \$42/MWH (in the middle of the range) and Edison's plants
2 experience a cost of \$26.41/MWH, the plants earn a margin of more than \$1
3 billion in a single year. By earning this dollar margin, the Commission would not
4 have to absolve Exelon Genco of the financial responsibility associated with
5 decommissioning in order to "promote" transfer of the plants to an unregulated
6 subsidiary.

7
8 **Q. Why is this a bad deal from the ratepayers' perspective?**

9 A. The good deal that Edison's shareholders get is not based on changing the way the
10 plants operate. It comes from changing the way the plants are regulated. This
11 means that the good deal to shareholders translates into a bad deal for ratepayers.
12 In the upside scenario where the plants are highly profitable, ratepayers would
13 have been much better off if the plants remained regulated because embedded
14 costs would have resulted in lower rates than purchased power charges. From a
15 ratepayer perspective, in the downside scenario where the plants are closed, there
16 is a low amount of remaining book value upon which embedded costs are based.

17
18 **Q. If Edison realizes the financial benefits that you described above in part
19 because it has written down the book value of its plants, isn't this a cost that
20 has already been borne by Edison shareholders implying that the upside
21 potential should also be realized by Edison's shareholders?**

22 A. No. The Act contains an earnings cap that is designed to require Edison to share
23 the benefits of extraordinary earnings with ratepayers. (See 220 ILCS
24 5/16-111(e).) Edison has written down its plants in part so that the Company
25 would not have to share earnings above the return on equity cap with ratepayers.
26 If Edison had not accelerated the writedown of its plants, it would have had to
27 give money back to ratepayers. Therefore, part of the reason Edison can
28 experience a large upside and a minimal downside of financial risk from future
29 operation of the nuclear plants is because the return on equity earned from frozen
30 rates would have been above the Company's cost of capital. Edison noted the

1 financial benefits of not exceeding the ROE cap as follows in its annual report and
2 its SEC 10-K report:

3
4 In accordance with the provisions of the 1997 Act, increased
5 amortization of regulatory assets may be recorded, thereby
6 reducing the earned return on common equity, if earnings
7 otherwise would have exceeded the maximum allowable rate of
8 return. The potential for earnings sharing or increased amortization
9 of regulatory assets could limit earnings in future periods.

10
11 In June – thanks to the contributions of Senior Vice President
12 Frank M. Clark and his Governmental Affairs team – an
13 amendment to the Illinois restructuring law was passed that
14 increased the allowable return on ComEd common equity by two
15 percentage points. Each of these steps established powerful
16 momentum toward achieving our goal of earnings in excess of
17 \$3.00 per share in 2000.

18 19 **VII.**

20 21 **SUMMARY OF RECOMMENDATIONS**

22 23 **Q. Please summarize your recommendations.**

24 A. The Commission should reject or substantially modify Edison's proposal. In a
25 separate proceeding, the Commission has a very significant threshold question
26 regarding whether it should allow Edison to transfer the nuclear plants to an
27 unregulated affiliate. If the Commission allows the transfer, the Commission
28 must take the steps necessary to ensure that Edison's shareholders are not unduly
29 enriched at the expense of ratepayers. My testimony reveals that Edison's
30 asserted "\$1 billion savings," in reality is a multi-million dollar rate increase.

31
32 The structure of Edison's proposal is designed to unjustly enrich Edison's
33 shareholders. Thus, my primary recommendation is that the Commission should
34 reject the underlying structure of Edison's proposal. My testimony outlines two
35 alternative structures: (1) an auction approach, under which Edison would auction
36 the decommissioning trust fund along with the decommissioning liabilities; or (2)
37 an up-front allocation of decommissioning costs between ratepayers and Exelon

1 Genco with an annual true-up. Either of these structures would be a significant
2 improvement over Edison's proposal.

3

4 If the Commission nevertheless approves the underlying structure of Edison's
5 proposal, the Commission must make several important modifications. First,
6 ratepayers should not be required to make any further decommissioning
7 payments; they have already paid more than their fair share. Second, the
8 Commission must ensure that Exelon Genco does not remove any money from the
9 decommissioning trust fund until all of the plants are fully decommissioned.
10 Finally, the Commission must ensure that Edison or its affiliates never come back
11 for another bite of the apple; the Commission must ensure that there is no
12 loophole that Edison can exploit.

13

14 The proposal as presented by Edison is no deal at all from the ratepayers'
15 perspective. The Commission should reject Edison's proposal outright or
16 significantly revamp it to adequately protect ratepayers.

17

18 **Q. Does this conclude your testimony?**

19 **A. Yes.**